

COVID 19 tagging

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patch test In 2020, women who were full-time wage and salary workers had median usual weekly earnings that were 81 percent of the earnings of male full-time wage and salary workers. In 1979, the first year for which comparable earnings data are available, women's earnings were 62 percent of men's. Most of the growth in women's earnings relative to men's occurred in the 1980s (when the women's-to-men's ratio went from 64 percent to 70 percent) and in the 1990s (when the ratio went from 72 percent to 77 percent). Since 2004, the women's-to-men's earnings ratio has remained in the 80 to 83 percent range. (See chart 1 and tables 1 and 12.)



This report presents earnings data from the Current Population Survey (CPS), a national monthly sample survey of about 60,000 eligible households conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics (BLS). The weekly and hourly earnings estimates in this report reflect calendar-year averages of information collected from one-fourth of the households in the monthly survey. The data in this report are distinct from the annual earnings estimates for full-time, year-round workers collected separately in the Annual Social and Economic Supplement (ASEC) to the CPS and published by the U.S. Census Bureau. (See the BLS website for an explanation of the differences between these datasets.)

The earnings comparisons in this report are on a broad level and do not control for many factors that can be important in explaining earnings differences, such as job skills and responsibilities, work experience, and specialization. The earnings estimates referenced throughout this report are medians. The median is the mid-point in the earnings distribution, with half of workers having earnings above the median level and half having earnings below.

See the accompanying technical notes section for more information, including a description of the source of the data and an explanation of the concepts and definitions used in this report.

Earnings of full-time workers

Below are data highlights for women and men who usually work full time (35 hours or more per week) in wage and salary jobs, with sections focusing on characteristics such as age, race and Hispanic or Latino ethnicity, education, occupation, and more.

Earnings by age group

In 2018, median weekly earnings were \$789 for all women age 16 and older. For men age 16 and older, median weekly earnings were \$973. Women's median weekly earnings were highest for those between the ages of 35 and 54, with no difference in the earnings of 35- to 44-year-olds and 45- to 54-year-olds (both at \$876). Women age 55 to 64 and age 65 and older had earnings that were only slightly lower (\$853 and \$811, respectively). For men, earnings were highest for 45- to 64-year-olds, with no difference in the earnings of 45- to 54- year-olds and 55- to 64-year-olds (both at \$1,137). Earnings were lowest among young women and men age 16 to 24 (\$522 and \$575, respectively) compared with other ages. (See chart 2 and table 1.)

In 2018, women's earnings ranged from 75 percent to 80 percent of men's earnings among workers age 35 and older. For those under age 35, the earnings differences between women and men were smaller, with women earning 87 percent to 92 percent of what men did. (See table 1.)

Women's-to-men's earnings ratios have grown substantially for most age groups since 1979. For young workers ages 16 to 24, the gains occurred primarily in the 1980s. For workers ages 25 to 64, the gains continued into the 2000s, but have tapered off in recent years. The earnings ratio for workers age 65 and older has been relatively flat since the late 1990s. (See table 12.)

Earnings by race and Hispanic or Latino ethnicity

Asian women and men continued to earn more than their White, Black, and Hispanic counterparts in 2018. Among women, Whites (\$817) earned 87 percent as much as Asians (\$937); Blacks (\$654) earned 70 percent; and Hispanics (\$617) earned 66 percent. Among men, these earnings differences were even larger: White men (\$1,002) earned 81 percent as much as Asian men (\$1,241); Black men (\$735) earned 59 percent as much; and Hispanic men (\$720) earned 58 percent. (See chart 3 and table 1.)

Earnings differences between women and men were largest among Asians and among Whites. Asian women earned 76 percent as much as Asian men in 2018, and White women earned 82 percent as much as their male counterparts. In comparison, Black women had median earnings that were 89 percent of Black men's, and Hispanic women's earnings were 86 percent of Hispanic men's. (See table 1.)

Women's earnings have increased considerably over time, while men's earnings have not. This can be seen among the major race and Hispanic ethnicity groups, with White women experiencing the greatest earnings growth since 1979 (the first year for which comparable data for Whites, Blacks, and Hispanics are available). From 1979 to 2018, inflation-adjusted median weekly earnings (also called constant-dollar earnings) increased by 37 percent for White women, by 20 percent for Black women, and by 21 percent for Hispanic women. For White and Black women, gains tapered off around 2004. Since that time, White and Black women have seen little net change in earnings. From 2004 to 2018, the earnings of White women edged up 5 percent, while the earnings of Black women edged slightly lower (-3 percent). On the other hand, Hispanic women's earnings have remained on an upward trend, although substantial earnings growth for them did not begin until the late 1990s. (See table 18.)

The long-term trend in men's earnings has been quite different than that for women. Inflation-adjusted earnings for White and Black men trended down from 1979 through the first part of the 1990s, followed by a period of growth that stalled in the early 2000s. For Hispanic men, earnings also declined from 1979 through the mid-1990s, then began to trend up. Over the full period, 1979 through 2018, inflation-adjusted earnings have shown little change on net for White (4 percent) and Hispanic men (2 percent). Black men's inflation-adjusted earnings showed no net change from 1979 to 2018. (See table 18.)

Data for Asians were not tabulated prior to 2000. Between 2000 and 2018, inflation-adjusted earnings for Asian women and men remained on an upward trend. Asian women's earnings grew by 17 percent and Asian men's earnings grew by 24 percent over the period for which data are available. (See table 18.)

Earnings by educational attainment

Median weekly earnings vary significantly by educational attainment. Among workers age 25 and older, those without a high school diploma had median weekly earnings of \$553, representing 42 percent of the earnings of workers with a bachelor's degree or higher (\$1,324) in 2018. For workers with a high school diploma who had not attended college, median earnings (\$730) were 55 percent of those with a bachelor's degree or higher. Workers with some college or an associate degree (median weekly earnings of \$826) made 62 percent of what workers with a bachelor's degree or more made. (See table 1.)

In each educational attainment category, the long-term trend in inflation-adjusted earnings has been more favorable for women than for men. Although both women and men without a high school diploma have experienced declines in inflation-adjusted earnings since 1979, the drop for women was much smaller than that for men: a 5-percent decrease for women, compared with a 26-percent decline for men. On an inflation-adjusted basis, earnings for women with a bachelor's degree or higher have increased by 34 percent since 1979, while earnings for men with a bachelor's degree or higher have risen by 19 percent. (Data refer to workers age 25 and older.) (See chart 4 and table 19.)

Earnings by occupation

Women and men working full time in management, business, and financial operations occupations continued to have higher median weekly earnings than workers in any other major occupational category in 2018 (\$1,168 for women and \$1,537 for men). Within this category, women who were chief executives (\$1,736) and computer and information systems managers (\$1,727) had the highest median weekly earnings in 2018. For men, those who were chief executives (\$2,488) and architectural and engineering managers (\$2,285) had the highest earnings within this major occupational category in 2018. (See table 2.)

The second-highest paying occupational category for women and men was professional and related occupations (\$1,024 for women and \$1,425 for men). This is a broad occupational category made up of several distinct job groupings for specialized fields such as computer science, engineering, law, education, and healthcare. Within this diverse category, women who were nurse practitioners (\$1,891) and pharmacists (\$1,890) had the highest earnings in 2018. For men, those who were physicians and surgeons (\$2,513), pharmacists (\$2,271), and lawyers (\$2,202) earned the most. (See table 2.)

Women and men employed in service occupations continued to earn less in 2018 (\$511 for women and \$641 for men) than workers in other major occupational categories. Within service occupations, women who were employed as dining room and cafeteria attendants and bartender helpers (\$408), as cooks (\$437), and as food preparation workers (\$446) had the lowest median weekly earnings in 2018. For men, those who were employed as combined food preparation and serving workers, including fast food (\$410) and as dishwashers (\$434) earned the least.

Occupational distributions of women and men

The occupational distributions of female and male full-time workers differ considerably. Compared with men, relatively few women work in construction, production, or transportation occupations, and women are far more concentrated in office and administrative support occupations. (See chart 5 and table 2.)

Women also are more likely than men to work in professional and related occupations. In 2018, 31 percent of women worked in professional and related occupations, compared with 20 percent of men. Within the professional category, though, the proportion of women employed in the higher paying job groups is much smaller than the proportion of men employed in them. In 2018, 10 percent of women in professional and related occupations were employed in the two relatively high-paying computer (median weekly earnings of \$1,345 for women and \$1,604 for men) and engineering (\$1,259 for women and \$1,528 for men) occupation groups, compared with 47 percent of men. Women were more likely to work in the education (\$934 for women and \$1,235 for men) and healthcare (\$1,078 for women and \$1,383 for men) occupation groups, which generally pay less than computer and engineering jobs. Sixty-seven percent of women in professional occupations worked in education and healthcare jobs in 2018, compared with 29 percent of men. (See table 2.)

Across all occupational categories, the three most common jobs for women were elementary and middle school teacher (\$982), registered nurse (\$1,156), and secretary or administrative assistant (\$753). Each of these occupations employed roughly 2 million women in 2018, collectively representing 13 percent of women in full-time wage and salary jobs.

Among men, the most common occupation by far was truck driver (driver/sales workers and truck drivers, \$829). In 2018, 2.6 million men were truck drivers, representing 4 percent of all male full-time wage and salary workers. Although engineering occupations are shown separately by specialty (civil, mechanical, etc.) in this report, if combined, engineer would be the second most common job for men. In 2018, a total of 1.9 million men were employed full time in the 16 designated engineering specialties (median weekly earnings ranging from \$1,551 to \$1,858). (See table 2.)

Earnings for workers with and without children under 18

In 2018, about one-third of full-time wage and salary workers were parents of children under age 18. (Children include sons, daughters, stepchildren, and adopted children under age 18 who live in the household.) Fathers of children under 18 earned more than men without children (\$1,098 and \$919, respectively). Among women, however, the difference in median weekly earnings between mothers of children under 18 (\$799) and those without children under 18 (\$784) was much smaller. (See table 7.)

Earnings by state of residence

Median weekly earnings and women's-to-men's earnings ratios vary by state of residence. (In this report, "state" refers to the 50 states and the District of Columbia.) The differences among the states reflect, in part, variation in the occupations and industries found in each state and differences in the demographic composition of each state's labor force. Readers should note that sampling error for the state estimates is considerably larger than it is for the national estimates. (See the technical notes section for an explanation of sampling error.) Consequently, earnings comparisons between states should be made with caution. Readers also should note that the state estimates are based on workers' state of residence; their reported earnings are not necessarily from a job located in the same state. (See table 3.)

Weekly work hours of full-time workers

Among full-time workers (that is, those usually working 35 hours or more per week), men are more likely than women to work more than 40 hours per week. In 2018, 25 percent of men who work full time usually worked 41 or more hours per week, compared with 14 percent of women. Women were more likely than men to work 35 to 39 hours per week: 10 percent of women worked such hours in 2018, while 4 percent of men did. A large majority of full-time workers had a 40-hour workweek (75 percent of women and 71 percent of men). Among those with a 40-hour workweek, women earned

86 percent as much as men. (This analysis excludes people who usually work 35 or more hours per week but whose hours vary.) (See table 5.)

Earnings of part-time workers

Women are about twice as likely as men to work part time—that is, less than 35 hours per week on a sole or main job (including those whose hours vary). Women who worked part time made up 24 percent of all female wage and salary workers in 2018. In comparison, 12 percent of men in wage and salary jobs worked part time. (See tables 4 and 5.)

Median weekly earnings for female part-timers were \$275 in 2018, slightly higher than the \$263 median for men. (See table 4.)

Part-time workers are more likely to be under age 25 than full-time workers. Among part-timers, 29 percent of women and 42 percent of men were under age 25 in 2018. Among full-time workers, 9 percent of women and 9 percent of men were under age 25. (See tables 1 and 4.)

Earnings of workers paid by the hour

In 2018, 61 percent of women and 56 percent of men in wage and salary jobs were paid by the hour. Women who were paid hourly rates had median hourly earnings of \$14.06 in 2018, which were 88 percent of the \$16.01 median for men. (See tables 8 and 11.)

Among workers who were paid hourly rates in 2018, about 3 percent of women and 2 percent of men had hourly earnings at or below the prevailing federal minimum wage of \$7.25. (See tables 10 and 11.) See the technical notes section for information about BLS estimates of the number of minimum wage workers.

Statistical Tables

Table 1. Median usual weekly earnings of full-time wage and salary workers, by selected characteristics, 2018 annual averages [Numbers in thousands]

Characteristic	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
See footnotes at end of table.										
Age										
Total, 16 years and older	115,567	\$886	\$2	51,425	\$789	\$3	64,142	\$973	\$3	81.1
16 to 24 years	10,428	548	4	4,611	522	3	5,818	575	5	90.8
16 to 19 years	1,382	449	7	545	421	5	837	471	9	89.4
20 to 24 years	9,046	576	3	4,065	546	6	4,981	592	4	92.2
25 years and older	105,138	932	2	46,814	830	3	58,324	1,026	4	80.9
25 to 34 years	28,874	808	4	12,681	750	4	16,193	862	6	87.0
35 to 44 years	26,452	986	5	11,528	876	6	14,924	1,101	10	79.6
45 to 54 years	25,565	1,002	5	11,621	876	6	13,944	1,137	7	77.0
55 to 64 years	19,585	994	6	8,937	853	8	10,647	1,137	8	75.0
65 years and older	4,662	944	12	2,046	811	19	2,616	1,050	25	77.2
Race and Hispanic or Latino Ethnicity										
White	88,953	916	3	38,384	817	3	50,570	1,002	4	81.5
Black or African American	15,041	694	4	7,760	654	5	7,282	735	7	89.0
Asian	7,643	1,095	16	3,474	937	17	4,169	1,241	16	75.5
Hispanic or Latino ethnicity	20,297	680	4	8,071	617	4	12,226	720	5	85.7
Marital Status										
Never married	34,984	710	3	15,541	675	4	19,444	738	4	91.5
Married, spouse present(1)	62,409	1,013	3	25,643	880	4	36,766	1,140	4	77.2
Widowed, divorced, or separated(2)	18,173	851	6	10,241	778	6	7,933	956	9	81.4
Widowed	1,807	812	17	1,313	755	17	494	946	31	79.8
Divorced	12,008	897	7	6,789	823	8	5,219	990	8	83.1
Separated(2)	4,359	750	10	2,139	667	10	2,220	855	16	78.0
Union Affiliation(3)										

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Characteristic	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Members of unions(4)	13,415	1,051	7	5,773	968	9	7,642	1,123	8	86.2
Represented by unions(5)	14,844	1,042	7	6,493	958	9	8,352	1,121	8	85.5
Not represented by a union	100,722	860	3	44,932	764	2	55,790	948	4	80.6
Educational Attainment										
Total, 25 years and older	105,138	932	2	46,814	830	3	58,324	1,026	4	80.9
Less than a high school diploma	6,999	553	4	2,238	469	4	4,761	607	4	77.3
High school graduates, no college	26,237	730	3	10,132	616	3	16,105	819	4	75.2
Some college or associate degree	27,476	826	4	12,755	717	4	14,721	951	6	75.4
Bachelor's degree and higher	44,427	1,324	7	21,689	1,145	4	22,738	1,524	8	75.1
Footnotes										
(1) Refers to people in opposite-sex married couples only.										
(2) Separated includes people who are married, spouse absent.										
(3) Differences in earnings levels between workers with and without union affiliation reflect a variety of factors in addition to coverage by a collective bargaining agreement, including the distribution of workers by occupation, industry, and geographic region.										
(4) Data refer to members of a labor union or an employee association similar to a union.										
(5) Data refer to both union members and workers who report no union affiliation but whose jobs are covered by a union or an employee association contract.										
Note: Estimates for the race groups shown (White, Black or African American, and Asian) do not sum to totals because data are not presented for all race groups. People of Hispanic or Latino ethnicity may be of any race; estimates for the race groups include Hispanics.										
Source: U.S. Bureau of Labor Statistics.										

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Total, full-time wage and salary workers	115,567	\$886	\$2	51,425	\$789	\$3	64,142	\$973	\$3	81.1

See footnotes at end of table.

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Management, professional, and related occupations	48,808	1,246	4	25,123	1,078	6	23,685	1,468	8	73.4
Management, business, and financial operations occupations	19,863	1,355	6	9,195	1,168	8	10,668	1,537	10	76.0
Management occupations	13,477	1,429	10	5,724	1,236	11	7,754	1,585	16	78.0
Chief executives	1,098	2,291	23	307	1,736	96	790	2,488	90	69.8
General and operations managers	939	1,338	32	283	1,139	23	656	1,427	39	79.8
Legislators	14	-	-	4	-	-	10	-	-	-
Advertising and promotions managers	39	-	-	16	-	-	23	-	-	-
Marketing and sales managers	963	1,567	38	447	1,362	34	517	1,852	75	73.5
Public relations and fundraising managers	61	1,415	52	43	-	-	18	-	-	-
Administrative services managers	147	1,215	74	46	-	-	101	1,266	123	-
Computer and information systems managers	601	1,877	39	153	1,727	222	448	1,920	98	89.9
Financial managers	1,158	1,466	38	663	1,262	32	495	1,784	69	70.7
Compensation and benefits managers	21	-	-	16	-	-	5	-	-	-
Human resources managers	294	1,381	49	221	1,330	66	73	1,761	79	75.5
Training and development managers	52	1,448	106	31	-	-	21	-	-	-
Industrial production managers	243	1,465	47	55	1,296	155	188	1,573	95	82.4
Purchasing managers	222	1,362	73	99	1,229	82	123	1,431	46	85.9
Transportation, storage, and distribution managers	269	1,131	28	43	-	-	226	1,138	30	-
Farmers, ranchers, and other agricultural managers	119	945	47	21	-	-	99	1,010	134	-
Construction managers	625	1,431	37	53	1,202	23	572	1,467	38	81.9
Education administrators	857	1,381	41	563	1,245	33	294	1,563	50	79.7
Architectural and engineering managers	149	2,226	192	19	-	-	131	2,285	43	-
Food service managers	827	809	27	407	708	26	420	922	39	76.8
Funeral service managers	0	-	-	0	-	-	0	-	-	-
Gaming managers	23	-	-	8	-	-	15	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Lodging managers	112	955	52	64	920	99	48	-	-	-
Medical and health services managers	567	1,408	33	418	1,331	45	149	1,729	140	77.0
Natural sciences managers	8	-	-	4	-	-	4	-	-	-
Postmasters and mail superintendents	22	-	-	15	-	-	8	-	-	-
Property, real estate, and community association managers	390	1,018	32	208	927	47	181	1,148	31	80.7
Social and community service managers	363	1,141	27	251	1,057	32	112	1,336	43	79.1
Emergency management directors	9	-	-	3	-	-	6	-	-	-
Managers, all other	3,285	1,525	21	1,263	1,341	21	2,022	1,628	29	82.4
Business and financial operations occupations	6,385	1,216	12	3,471	1,105	15	2,914	1,383	22	79.9
Agents and business managers of artists, performers, and athletes	31	-	-	18	-	-	13	-	-	-
Buyers and purchasing agents, farm products	10	-	-	3	-	-	7	-	-	-
Wholesale and retail buyers, except farm products	147	878	61	65	880	114	82	878	97	100.2
Purchasing agents, except wholesale, retail, and farm products	223	1,160	50	102	1,032	60	121	1,209	23	85.4
Claims adjusters, appraisers, examiners, and investigators	334	998	19	189	913	35	145	1,167	32	78.2
Compliance officers	278	1,296	75	149	1,165	49	129	1,450	56	80.3
Cost estimators	109	1,165	36	14	-	-	95	1,208	80	-
Human resources workers	620	1,161	29	429	1,107	48	190	1,328	127	83.4
Compensation, benefits, and job analysis specialists	48	-	-	31	-	-	17	-	-	-
Training and development specialists	111	1,092	65	64	1,086	116	47	-	-	-
Logisticians	127	1,019	49	46	-	-	81	1,131	222	-
Management analysts	635	1,532	45	279	1,437	29	356	1,642	88	87.5
Meeting, convention, and event planners	89	1,002	77	69	1,006	162	21	-	-	-
Fundraisers	82	1,262	259	60	1,168	37	22	-	-	-

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Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Market research analysts and marketing specialists	299	1,246	50	174	1,148	32	125	1,503	183	76.4
Business operations specialists, all other	223	1,150	17	127	1,072	116	95	1,234	205	86.9
Accountants and auditors	1,615	1,209	19	969	1,108	30	646	1,404	57	78.9
Appraisers and assessors of real estate	47	-	-	22	-	-	24	-	-	-
Budget analysts	52	1,351	79	35	-	-	17	-	-	-
Credit analysts	27	-	-	14	-	-	12	-	-	-
Financial analysts	261	1,470	51	122	1,197	55	138	1,599	110	74.9
Personal financial advisors	414	1,473	89	146	1,207	107	268	1,647	59	73.3
Insurance underwriters	122	1,268	94	71	1,032	76	51	1,413	519	73.0
Financial examiners	11	-	-	9	-	-	2	-	-	-
Credit counselors and loan officers	332	1,168	47	177	948	38	155	1,443	50	65.7
Tax examiners and collectors, and revenue agents	42	-	-	29	-	-	13	-	-	-
Tax preparers	62	1,028	82	36	-	-	26	-	-	-
Financial specialists, all other	35	-	-	22	-	-	13	-	-	-
Professional and related occupations	28,945	1,176	5	15,929	1,024	6	13,017	1,425	9	71.9
Computer and mathematical occupations	4,755	1,539	15	1,184	1,345	28	3,571	1,604	22	83.9
Computer and information research scientists	20	-	-	4	-	-	16	-	-	-
Computer systems analysts	580	1,521	45	222	1,246	34	358	1,647	39	75.7
Information security analysts	93	1,635	96	18	-	-	75	1,625	176	-
Computer programmers	428	1,591	45	91	1,445	54	338	1,662	55	86.9
Software developers, applications and systems software	1,611	1,864	25	327	1,644	36	1,283	1,894	11	86.8
Web developers	164	1,333	56	49	-	-	115	1,418	105	-
Computer support specialists	516	1,085	50	140	1,015	68	376	1,114	56	91.1
Database administrators	108	1,493	95	40	-	-	67	1,573	229	-
Network and computer systems administrators	192	1,430	65	37	-	-	155	1,478	60	-

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Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Computer network architects	112	1,765	39	10	-	-	102	1,771	50	-
Computer occupations, all other	678	1,226	57	131	1,208	64	548	1,238	89	97.6
Actuaries	35	-	-	11	-	-	24	-	-	-
Mathematicians	3	-	-	1	-	-	2	-	-	-
Operations research analysts	125	1,418	77	58	1,299	168	66	1,566	297	83.0
Statisticians	85	1,437	107	43	-	-	41	-	-	-
Miscellaneous mathematical science occupations	5	-	-	2	-	-	3	-	-	-
Architecture and engineering occupations	2,994	1,484	17	453	1,259	30	2,541	1,528	16	82.4
Architects, except naval	170	1,464	37	52	1,301	74	118	1,538	87	84.6
Surveyors, cartographers, and photogrammetrists	35	-	-	7	-	-	28	-	-	-
Aerospace engineers	145	1,788	67	16	-	-	129	1,836	142	-
Agricultural engineers	5	-	-	0	-	-	5	-	-	-
Biomedical engineers	12	-	-	1	-	-	11	-	-	-
Chemical engineers	65	1,858	33	8	-	-	57	1,858	31	-
Civil engineers	410	1,495	55	63	1,282	48	346	1,551	47	82.7
Computer hardware engineers	70	1,772	271	11	-	-	60	1,852	86	-
Electrical and electronics engineers	282	1,646	37	31	-	-	251	1,661	35	-
Environmental engineers	35	-	-	5	-	-	30	-	-	-
Industrial engineers, including health and safety	245	1,499	39	54	1,163	57	191	1,571	57	74.0
Marine engineers and naval architects	15	-	-	0	-	-	15	-	-	-
Materials engineers	42	-	-	10	-	-	32	-	-	-
Mechanical engineers	313	1,562	47	31	-	-	282	1,581	67	-
Mining and geological engineers, including mining safety engineers	8	-	-	2	-	-	6	-	-	-
Nuclear engineers	13	-	-	1	-	-	12	-	-	-
Petroleum engineers	27	-	-	5	-	-	22	-	-	-
Engineers, all other	528	1,575	36	65	1,356	113	463	1,610	58	84.2

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Drafters	112	1,021	46	22	-	-	91	1,029	45	-
Engineering technicians, except drafters	398	1,129	26	66	934	73	332	1,154	22	80.9
Surveying and mapping technicians	63	984	80	3	-	-	60	995	83	-
Life, physical, and social science occupations	1,308	1,270	34	575	1,156	24	733	1,357	20	85.2
Agricultural and food scientists	30	-	-	13	-	-	16	-	-	-
Biological scientists	101	1,250	82	46	-	-	55	1,164	203	-
Conservation scientists and foresters	17	-	-	8	-	-	9	-	-	-
Medical scientists	160	1,319	139	81	1,156	49	80	1,416	223	81.6
Life scientists, all other	1	-	-	1	-	-	0	-	-	-
Astronomers and physicists	14	-	-	0	-	-	14	-	-	-
Atmospheric and space scientists	7	-	-	1	-	-	6	-	-	-
Chemists and materials scientists	115	1,284	73	45	-	-	70	1,362	57	-
Environmental scientists and geoscientists	80	1,336	40	28	-	-	52	1,427	43	-
Physical scientists, all other	289	1,455	39	120	1,341	57	169	1,582	51	84.8
Economists	35	-	-	6	-	-	29	-	-	-
Survey researchers	0	-	-	0	-	-	0	-	-	-
Psychologists	134	1,331	106	99	1,255	73	35	-	-	-
Sociologists	5	-	-	3	-	-	2	-	-	-
Urban and regional planners	28	-	-	13	-	-	15	-	-	-
Miscellaneous social scientists and related workers	39	-	-	14	-	-	25	-	-	-
Agricultural and food science technicians	31	-	-	7	-	-	24	-	-	-
Biological technicians	17	-	-	7	-	-	10	-	-	-
Chemical technicians	58	1,002	42	17	-	-	42	-	-	-
Geological and petroleum technicians	11	-	-	4	-	-	7	-	-	-
Nuclear technicians	11	-	-	3	-	-	8	-	-	-
Social science research assistants	0	-	-	0	-	-	0	-	-	-
Miscellaneous life, physical, and social science technicians	124	862	31	58	856	23	66	893	123	95.9

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Community and social service occupations	2,223	913	10	1,469	886	11	754	984	21	90.0
Counselors	705	941	15	506	913	19	199	1,004	19	90.9
Social workers	753	907	15	611	897	15	141	958	40	93.6
Probation officers and correctional treatment specialists	105	944	30	60	930	34	45	-	-	-
Social and human service assistants	166	749	22	133	752	22	33	-	-	-
Miscellaneous community and social service specialists, including health educators and community health workers	62	881	78	48	-	-	14	-	-	-
Clergy	337	990	45	68	855	39	268	1,036	36	82.5
Directors, religious activities and education	51	927	49	25	-	-	27	-	-	-
Religious workers, all other	45	-	-	18	-	-	27	-	-	-
Legal occupations	1,466	1,467	29	815	1,243	32	651	1,910	31	65.1
Lawyers	853	1,947	70	344	1,762	26	509	2,202	187	80.0
Judicial law clerks	15	-	-	8	-	-	7	-	-	-
Judges, magistrates, and other judicial workers	69	1,602	84	19	-	-	49	-	-	-
Paralegals and legal assistants	413	948	25	359	953	25	54	917	42	103.9
Miscellaneous legal support workers	117	1,143	46	85	1,109	58	32	-	-	-
Education, training, and library occupations	7,166	1,002	9	5,251	934	8	1,915	1,235	17	75.6
Postsecondary teachers	994	1,439	29	460	1,253	36	534	1,603	60	78.2
Preschool and kindergarten teachers	568	648	28	555	643	28	14	-	-	-
Elementary and middle school teachers	3,030	1,010	11	2,410	982	11	620	1,148	19	85.5
Secondary school teachers	948	1,141	12	556	1,092	26	392	1,226	36	89.1
Special education teachers	324	1,039	20	281	1,042	18	43	-	-	-
Other teachers and instructors	388	957	47	215	840	41	172	1,095	47	76.7
Archivists, curators, and museum technicians	37	-	-	20	-	-	17	-	-	-
Librarians	127	927	79	98	910	55	29	-	-	-
Library technicians	10	-	-	7	-	-	3	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Teacher assistants	615	556	14	553	550	17	62	584	82	94.2
Other education, training, and library workers	125	1,095	98	95	1,036	83	30	-	-	-
Arts, design, entertainment, sports, and media occupations	1,880	1,086	24	828	997	23	1,052	1,151	14	86.6
Artists and related workers	64	1,078	71	18	-	-	46	-	-	-
Designers	684	1,060	24	327	932	38	357	1,169	27	79.7
Actors	7	-	-	2	-	-	5	-	-	-
Producers and directors	147	1,224	113	49	-	-	98	1,476	204	-
Athletes, coaches, umpires, and related workers	164	1,044	25	35	-	-	129	1,049	27	-
Dancers and choreographers	11	-	-	7	-	-	4	-	-	-
Musicians, singers, and related workers	47	-	-	19	-	-	28	-	-	-
Entertainers and performers, sports and related workers, all other	17	-	-	10	-	-	7	-	-	-
Announcers	26	-	-	4	-	-	22	-	-	-
News analysts, reporters and correspondents	59	1,012	42	30	-	-	29	-	-	-
Public relations specialists	118	1,313	92	78	1,169	78	40	-	-	-
Editors	124	1,112	35	67	1,138	129	57	1,104	34	103.1
Technical writers	60	1,318	108	35	-	-	25	-	-	-
Writers and authors	110	1,233	70	68	1,036	55	42	-	-	-
Miscellaneous media and communication workers	62	880	28	51	850	36	12	-	-	-
Broadcast and sound engineering technicians and radio operators	73	1,028	67	7	-	-	66	1,038	61	-
Photographers	68	904	102	16	-	-	51	1,006	124	-
Television, video, and motion picture camera operators and editors	35	-	-	6	-	-	30	-	-	-
Media and communication equipment workers, all other	4	-	-	0	-	-	4	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Healthcare practitioners and technical occupations	7,154	1,140	8	5,354	1,078	11	1,800	1,383	27	77.9
Chiropractors	15	-	-	3	-	-	12	-	-	-
Dentists	56	1,884	40	28	-	-	27	-	-	-
Dietitians and nutritionists	70	967	45	63	940	41	8	-	-	-
Optometrists	29	-	-	15	-	-	13	-	-	-
Pharmacists	263	2,071	249	165	1,890	172	98	2,271	111	83.2
Physicians and surgeons	827	2,001	148	352	1,677	101	475	2,513	231	66.7
Physician assistants	118	1,752	37	80	1,646	585	37	-	-	-
Podiatrists	4	-	-	1	-	-	3	-	-	-
Audiologists	8	-	-	6	-	-	2	-	-	-
Occupational therapists	80	1,283	41	64	1,252	65	16	-	-	-
Physical therapists	209	1,395	46	139	1,387	53	71	1,410	79	98.4
Radiation therapists	13	-	-	8	-	-	6	-	-	-
Recreational therapists	11	-	-	10	-	-	1	-	-	-
Respiratory therapists	95	1,074	48	59	1,000	44	36	-	-	-
Speech-language pathologists	105	1,215	64	100	1,214	62	6	-	-	-
Exercise physiologists	2	-	-	2	-	-	0	-	-	-
Therapists, all other	155	1,047	37	122	1,014	75	33	-	-	-
Veterinarians	64	1,677	107	46	-	-	18	-	-	-
Registered nurses	2,584	1,167	11	2,270	1,156	11	315	1,271	31	91.0
Nurse anesthetists	22	-	-	8	-	-	13	-	-	-
Nurse midwives	2	-	-	2	-	-	0	-	-	-
Nurse practitioners	158	1,894	23	134	1,891	22	24	-	-	-
Health diagnosing and treating practitioners, all other	10	-	-	4	-	-	6	-	-	-
Clinical laboratory technologists and technicians	290	893	34	215	911	34	75	819	41	111.2
Dental hygienists	75	1,047	45	72	1,055	64	3	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Diagnostic related technologists and technicians	269	1,140	44	172	1,061	61	97	1,232	44	86.1
Emergency medical technicians and paramedics	180	894	48	59	764	24	122	943	50	81.0
Health practitioner support technologists and technicians	542	691	17	431	655	15	112	807	21	81.2
Licensed practical and licensed vocational nurses	490	757	21	434	743	21	56	936	139	79.4
Medical records and health information technicians	140	765	40	129	739	38	11	-	-	-
Opticians, dispensing	47	-	-	36	-	-	11	-	-	-
Miscellaneous health technologists and technicians	117	873	97	73	791	31	44	-	-	-
Other healthcare practitioners and technical occupations	100	1,022	52	52	961	40	48	-	-	-
Service occupations	16,288	569	3	8,340	511	2	7,948	641	6	79.7
Healthcare support occupations	2,595	561	6	2,235	548	6	361	661	21	82.9
Nursing, psychiatric, and home health aides	1,419	516	4	1,265	513	4	154	558	22	91.9
Occupational therapy assistants and aides	24	-	-	21	-	-	4	-	-	-
Physical therapist assistants and aides	68	848	32	43	-	-	24	-	-	-
Massage therapists	40	-	-	24	-	-	15	-	-	-
Dental assistants	197	606	13	187	598	12	9	-	-	-
Medical assistants	499	612	10	454	607	10	45	-	-	-
Medical transcriptionists	23	-	-	18	-	-	4	-	-	-
Pharmacy aides	28	-	-	23	-	-	5	-	-	-
Veterinary assistants and laboratory animal caretakers	49	-	-	39	-	-	10	-	-	-
Phlebotomists	96	624	16	67	602	14	29	-	-	-
Miscellaneous healthcare support occupations, including medical equipment preparers	154	598	16	93	559	20	61	703	52	79.5
Protective service occupations	2,836	848	15	578	613	10	2,258	922	17	66.5

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
First-line supervisors of correctional officers	47	-	-	13	-	-	35	-	-	-
First-line supervisors of police and detectives	85	1,460	48	12	-	-	74	1,461	63	-
First-line supervisors of fire fighting and prevention workers	52	1,304	65	2	-	-	50	1,321	59	-
First-line supervisors of protective service workers, all other	74	839	212	16	-	-	58	886	61	-
Firefighters	295	1,126	43	14	-	-	280	1,133	24	-
Fire inspectors	18	-	-	2	-	-	16	-	-	-
Bailiffs, correctional officers, and jailers	394	742	28	105	646	26	289	811	35	79.7
Detectives and criminal investigators	157	1,331	65	35	-	-	122	1,317	71	-
Fish and game wardens	6	-	-	0	-	-	5	-	-	-
Parking enforcement workers	4	-	-	4	-	-	0	-	-	-
Police and sheriff's patrol officers	728	1,092	26	106	816	80	622	1,131	24	72.1
Transit and railroad police	1	-	-	0	-	-	1	-	-	-
Animal control workers	13	-	-	8	-	-	5	-	-	-
Private detectives and investigators	89	851	69	46	-	-	43	-	-	-
Security guards and gaming surveillance officers	781	596	9	187	506	9	594	636	19	79.6
Crossing guards	28	-	-	6	-	-	22	-	-	-
Transportation security screeners	33	-	-	6	-	-	27	-	-	-
Lifeguards and other recreational, and all other protective service workers	31	-	-	16	-	-	15	-	-	-
Food preparation and serving related occupations	4,394	501	4	2,184	473	5	2,210	533	9	88.7
Chefs and head cooks	365	615	13	65	562	38	300	624	20	90.1
First-line supervisors of food preparation and serving workers	397	583	20	231	539	17	166	668	21	80.7
Cooks	1,325	486	6	521	437	9	804	518	8	84.4
Food preparation workers	473	463	11	267	446	13	206	486	14	91.8
Bartenders	275	581	11	151	560	23	124	601	17	93.2

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Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Combined food preparation and serving workers, including fast food	147	436	26	83	475	32	64	410	16	115.9
Counter attendants, cafeteria, food concession, and coffee shop	41	-	-	22	-	-	19	-	-	-
Waiters and waitresses	932	496	8	611	478	9	321	551	35	86.8
Food servers, nonrestaurant	106	484	13	74	475	46	32	-	-	-
Dining room and cafeteria attendants and bartender helpers	118	447	34	58	408	13	59	500	24	81.6
Dishwashers	111	441	22	22	-	-	89	434	22	-
Hosts and hostesses, restaurant, lounge, and coffee shop	102	471	23	78	473	22	24	-	-	-
Food preparation and serving related workers, all other	2	-	-	1	-	-	1	-	-	-
Building and grounds cleaning and maintenance occupations	3,695	551	6	1,322	477	5	2,373	604	5	79.0
First-line supervisors of housekeeping and janitorial workers	193	711	27	77	615	49	116	772	34	79.7
First-line supervisors of landscaping, lawn service, and groundskeeping workers	95	770	20	2	-	-	93	774	34	-
Janitors and building cleaners	1,672	571	8	480	491	8	1,193	607	8	80.9
Maids and housekeeping cleaners	825	467	8	723	457	8	102	559	21	81.8
Pest control workers	75	688	94	4	-	-	70	725	82	-
Grounds maintenance workers	834	572	12	36	-	-	798	576	10	-
Personal care and service occupations	2,768	544	7	2,022	517	5	746	638	25	81.0
First-line supervisors of gaming workers	125	793	71	43	-	-	83	914	46	-
First-line supervisors of personal service workers	86	747	47	60	739	49	27	-	-	-
Animal trainers	11	-	-	7	-	-	4	-	-	-
Nonfarm animal caretakers	102	555	42	79	548	55	24	-	-	-
Gaming services workers	73	654	44	36	-	-	37	-	-	-
Motion picture projectionists	0	-	-	0	-	-	0	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Ushers, lobby attendants, and ticket takers	5	-	-	3	-	-	3	-	-	-
Miscellaneous entertainment attendants and related workers	85	523	33	28	-	-	56	518	24	-
Embalmers and funeral attendants	11	-	-	3	-	-	8	-	-	-
Morticians, undertakers, and funeral directors	27	-	-	7	-	-	20	-	-	-
Barbers	48	-	-	15	-	-	34	-	-	-
Hairdressers, hairstylists, and cosmetologists	309	545	17	287	548	16	22	-	-	-
Miscellaneous personal appearance workers	258	523	22	206	512	13	52	615	40	83.3
Baggage porters, bellhops, and concierges	73	620	16	13	-	-	59	652	103	-
Tour and travel guides	22	-	-	9	-	-	13	-	-	-
Childcare workers	437	500	10	405	492	10	32	-	-	-
Personal care aides	786	500	7	654	493	8	132	555	33	88.8
Recreation and fitness workers	208	603	24	109	543	43	100	724	57	75.0
Residential advisors	29	-	-	18	-	-	11	-	-	-
Personal care and service workers, all other	74	522	50	42	-	-	32	-	-	-
Sales and office occupations	23,714	742	3	14,166	696	4	9,548	846	8	82.3
Sales and related occupations	10,077	798	7	4,455	651	7	5,621	949	10	68.6
First-line supervisors of retail sales workers	2,421	795	14	1,062	672	12	1,359	911	16	73.8
First-line supervisors of non-retail sales workers	893	1,153	21	305	1,054	49	588	1,199	64	87.9
Cashiers	1,390	465	7	1,013	463	8	377	468	16	98.9
Counter and rental clerks	82	729	22	30	-	-	51	769	24	-
Parts salespersons	109	702	40	11	-	-	98	718	43	-
Retail salespersons	1,860	657	12	716	543	14	1,144	764	14	71.1
Advertising sales agents	169	998	119	79	1,053	39	91	950	39	110.8
Insurance sales agents	466	859	22	261	809	20	205	1,048	189	77.2
Securities, commodities, and financial services sales agents	197	1,440	35	66	1,047	95	131	1,639	249	63.9

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Travel agents	53	789	57	43	-	-	10	-	-	-
Sales representatives, services, all other	427	1,230	89	113	933	103	315	1,345	30	69.4
Sales representatives, wholesale and manufacturing	1,112	1,161	15	295	1,009	36	817	1,239	27	81.4
Models, demonstrators, and product promoters	15	-	-	11	-	-	3	-	-	-
Real estate brokers and sales agents	528	1,019	51	291	883	53	236	1,264	127	69.9
Sales engineers	38	-	-	4	-	-	34	-	-	-
Telemarketers	50	559	29	31	-	-	19	-	-	-
Door-to-door sales workers, news and street vendors, and related workers	41	-	-	17	-	-	25	-	-	-
Sales and related workers, all other	227	1,036	62	109	873	40	118	1,323	57	66.0
Office and administrative support occupations	13,637	717	3	9,711	711	4	3,926	738	8	96.3
First-line supervisors of office and administrative support workers	1,279	885	15	892	835	14	386	1,050	37	79.5
Switchboard operators, including answering service	21	-	-	19	-	-	3	-	-	-
Telephone operators	29	-	-	22	-	-	6	-	-	-
Communications equipment operators, all other	7	-	-	2	-	-	5	-	-	-
Bill and account collectors	114	711	21	85	694	20	28	-	-	-
Billing and posting clerks	417	721	22	361	725	19	56	664	27	109.2
Bookkeeping, accounting, and auditing clerks	679	742	10	575	739	10	104	778	52	95.0
Gaming cage workers	7	-	-	6	-	-	1	-	-	-
Payroll and timekeeping clerks	111	827	38	100	807	39	11	-	-	-
Procurement clerks	30	-	-	14	-	-	16	-	-	-
Tellers	240	584	8	206	584	8	34	-	-	-
Financial clerks, all other	77	839	166	48	-	-	30	-	-	-
Brokerage clerks	5	-	-	4	-	-	2	-	-	-
Correspondence clerks	5	-	-	3	-	-	2	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Court, municipal, and license clerks	78	897	71	61	804	54	17	-	-	-
Credit authorizers, checkers, and clerks	50	818	149	30	-	-	21	-	-	-
Customer service representatives	1,904	683	9	1,226	680	10	678	689	18	98.7
Eligibility interviewers, government programs	67	887	61	53	841	79	14	-	-	-
File clerks	110	650	33	86	624	26	23	-	-	-
Hotel, motel, and resort desk clerks	85	520	28	56	505	26	29	-	-	-
Interviewers, except eligibility and loan	114	702	45	96	686	53	18	-	-	-
Library assistants, clerical	34	-	-	26	-	-	8	-	-	-
Loan interviewers and clerks	115	827	42	99	797	49	16	-	-	-
New accounts clerks	21	-	-	13	-	-	8	-	-	-
Order clerks	57	659	29	29	-	-	28	-	-	-
Human resources assistants, except payroll and timekeeping	53	816	126	45	-	-	7	-	-	-
Receptionists and information clerks	934	605	6	853	606	6	81	593	33	102.2
Reservation and transportation ticket agents and travel clerks	109	745	114	60	766	86	50	681	143	112.5
Information and record clerks, all other	95	733	22	71	724	21	24	-	-	-
Cargo and freight agents	18	-	-	12	-	-	6	-	-	-
Couriers and messengers	192	786	33	29	-	-	164	821	42	-
Dispatchers	270	783	47	162	725	29	108	926	63	78.3
Meter readers, utilities	24	-	-	2	-	-	22	-	-	-
Postal service clerks	115	765	58	63	771	80	51	758	84	101.7
Postal service mail carriers	288	931	28	118	808	51	170	983	30	82.2
Postal service mail sorters, processors, and processing machine operators	53	980	139	32	-	-	22	-	-	-
Production, planning, and expediting clerks	252	870	39	134	790	49	119	1,004	88	78.7
Shipping, receiving, and traffic clerks	524	632	16	160	590	24	365	654	20	90.2
Stock clerks and order fillers	988	562	11	359	570	16	629	558	15	102.2
Weighers, measurers, checkers, and samplers, recordkeeping	44	-	-	14	-	-	30	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Secretaries and administrative assistants	1,977	759	7	1,855	753	7	122	903	54	83.4
Computer operators	67	763	31	40	-	-	27	-	-	-
Data entry keyers	224	655	22	173	643	25	52	730	68	88.1
Word processors and typists	53	858	69	43	-	-	9	-	-	-
Desktop publishers	1	-	-	0	-	-	1	-	-	-
Insurance claims and policy processing clerks	211	719	20	175	713	26	36	-	-	-
Mail clerks and mail machine operators, except postal service	44	-	-	13	-	-	31	-	-	-
Office clerks, general	925	697	11	797	701	11	128	670	29	104.6
Office machine operators, except computer	13	-	-	9	-	-	5	-	-	-
Proofreaders and copy markers	7	-	-	4	-	-	2	-	-	-
Statistical assistants	41	-	-	25	-	-	16	-	-	-
Office and administrative support workers, all other	456	794	25	352	762	15	104	920	38	82.8
Natural resources, construction, and maintenance occupations	11,546	824	6	516	638	28	11,030	834	7	76.5
Farming, fishing, and forestry occupations	850	581	7	183	483	12	667	602	8	80.2
First-line supervisors of farming, fishing, and forestry workers	45	-	-	7	-	-	37	-	-	-
Agricultural inspectors	18	-	-	6	-	-	13	-	-	-
Animal breeders	2	-	-	0	-	-	2	-	-	-
Graders and sorters, agricultural products	75	593	26	37	-	-	38	-	-	-
Miscellaneous agricultural workers	641	552	13	130	474	13	512	578	9	82.0
Fishers and related fishing workers	12	-	-	0	-	-	12	-	-	-
Hunters and trappers	3	-	-	0	-	-	3	-	-	-
Forest and conservation workers	17	-	-	3	-	-	15	-	-	-
Logging workers	36	-	-	0	-	-	36	-	-	-
Construction and extraction occupations	6,414	808	5	191	785	41	6,223	809	6	97.0
First-line supervisors of construction trades and extraction workers	541	1,059	36	20	-	-	521	1,073	37	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Boilermakers	16	-	-	0	-	-	16	-	-	-
Brickmasons, blockmasons, and stonemasons	102	763	48	2	-	-	100	761	48	-
Carpenters	973	756	15	20	-	-	953	759	15	-
Carpet, floor, and tile installers and finishers	108	692	31	4	-	-	105	682	31	-
Cement masons, concrete finishers, and terrazzo workers	46	-	-	0	-	-	46	-	-	-
Construction laborers	1,470	717	8	49	-	-	1,421	717	8	-
Paving, surfacing, and tamping equipment operators	19	-	-	0	-	-	18	-	-	-
Pile-driver operators	1	-	-	0	-	-	1	-	-	-
Operating engineers and other construction equipment operators	328	905	21	5	-	-	323	905	21	-
Drywall installers, ceiling tile installers, and tapers	125	704	26	1	-	-	124	707	26	-
Electricians	781	965	22	16	-	-	766	966	22	-
Glaziers	35	-	-	0	-	-	35	-	-	-
Insulation workers	49	-	-	1	-	-	48	-	-	-
Painters, construction and maintenance	380	679	15	20	-	-	360	679	14	-
Paperhangers	3	-	-	0	-	-	3	-	-	-
Pipelayers, plumbers, pipefitters, and steamfitters	531	921	31	17	-	-	514	916	26	-
Plasterers and stucco masons	15	-	-	1	-	-	14	-	-	-
Reinforcing iron and rebar workers	3	-	-	0	-	-	3	-	-	-
Roofers	148	687	18	2	-	-	146	686	19	-
Sheet metal workers	129	881	24	2	-	-	127	882	23	-
Structural iron and steel workers	52	934	52	1	-	-	51	941	52	-
Solar photovoltaic installers	9	-	-	0	-	-	9	-	-	-
Helpers, construction trades	68	620	18	1	-	-	67	622	18	-
Construction and building inspectors	82	996	121	14	-	-	68	1,015	93	-
Elevator installers and repairers	25	-	-	2	-	-	23	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Fence erectors	21	-	-	0	-	-	21	-	-	-
Hazardous materials removal workers	30	-	-	3	-	-	27	-	-	-
Highway maintenance workers	109	781	35	4	-	-	105	772	39	-
Rail-track laying and maintenance equipment operators	12	-	-	0	-	-	12	-	-	-
Septic tank servicers and sewer pipe cleaners	6	-	-	0	-	-	6	-	-	-
Miscellaneous construction and related workers	25	-	-	0	-	-	24	-	-	-
Derrick, rotary drill, and service unit operators, oil, gas, and mining	29	-	-	1	-	-	28	-	-	-
Earth drillers, except oil and gas	23	-	-	0	-	-	23	-	-	-
Explosives workers, ordnance handling experts, and blasters	14	-	-	0	-	-	14	-	-	-
Mining machine operators	59	1,402	81	4	-	-	55	1,389	79	-
Roof bolters, mining	1	-	-	0	-	-	1	-	-	-
Roustabouts, oil and gas	9	-	-	0	-	-	9	-	-	-
Helpers--extraction workers	2	-	-	0	-	-	2	-	-	-
Other extraction workers	35	-	-	0	-	-	34	-	-	-
Installation, maintenance, and repair occupations	4,282	934	9	142	823	62	4,140	936	9	87.9
First-line supervisors of mechanics, installers, and repairers	270	1,087	75	15	-	-	255	1,111	77	-
Computer, automated teller, and office machine repairers	157	932	25	20	-	-	137	940	24	-
Radio and telecommunications equipment installers and repairers	125	1,131	50	18	-	-	108	1,134	37	-
Avionics technicians	11	-	-	1	-	-	10	-	-	-
Electric motor, power tool, and related repairers	22	-	-	2	-	-	20	-	-	-
Electrical and electronics installers and repairers, transportation equipment	0	-	-	0	-	-	0	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Electrical and electronics repairers, industrial and utility	12	-	-	2	-	-	10	-	-	-
Electronic equipment installers and repairers, motor vehicles	5	-	-	0	-	-	5	-	-	-
Electronic home entertainment equipment installers and repairers	29	-	-	0	-	-	29	-	-	-
Security and fire alarm systems installers	47	-	-	0	-	-	47	-	-	-
Aircraft mechanics and service technicians	155	1,117	34	7	-	-	147	1,141	51	-
Automotive body and related repairers	114	820	42	0	-	-	114	820	44	-
Automotive glass installers and repairers	22	-	-	1	-	-	21	-	-	-
Automotive service technicians and mechanics	709	800	12	10	-	-	698	802	13	-
Bus and truck mechanics and diesel engine specialists	358	942	31	5	-	-	352	943	31	-
Heavy vehicle and mobile equipment service technicians and mechanics	199	1,013	26	3	-	-	196	1,011	26	-
Small engine mechanics	28	-	-	0	-	-	28	-	-	-
Miscellaneous vehicle and mobile equipment mechanics, installers, and repairers	68	611	38	3	-	-	65	612	37	-
Control and valve installers and repairers	20	-	-	2	-	-	18	-	-	-
Heating, air conditioning, and refrigeration mechanics and installers	384	890	38	3	-	-	381	891	38	-
Home appliance repairers	28	-	-	0	-	-	28	-	-	-
Industrial and refractory machinery mechanics	424	981	32	6	-	-	418	982	32	-
Maintenance and repair workers, general	456	870	30	16	-	-	439	874	29	-
Maintenance workers, machinery	23	-	-	0	-	-	23	-	-	-
Millwrights	40	-	-	1	-	-	39	-	-	-
Electrical power-line installers and repairers	129	1,300	55	5	-	-	124	1,292	54	-
Telecommunications line installers and repairers	196	1,014	46	9	-	-	187	1,026	51	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Precision instrument and equipment repairers	46	-	-	6	-	-	39	-	-	-
Wind turbine service technicians	2	-	-	0	-	-	2	-	-	-
Coin, vending, and amusement machine servicers and repairers	25	-	-	2	-	-	23	-	-	-
Commercial divers	0	-	-	0	-	-	0	-	-	-
Locksmiths and safe repairers	18	-	-	0	-	-	18	-	-	-
Manufactured building and mobile home installers	5	-	-	0	-	-	5	-	-	-
Riggers	13	-	-	0	-	-	13	-	-	-
Signal and track switch repairers	14	-	-	0	-	-	14	-	-	-
Helpers--installation, maintenance, and repair workers	17	-	-	1	-	-	17	-	-	-
Other installation, maintenance, and repair workers	111	827	68	3	-	-	108	837	83	-
Production, transportation, and material moving occupations	15,210	707	4	3,279	561	6	11,932	762	5	73.6
Production occupations	7,668	723	5	2,041	575	6	5,627	793	6	72.5
First-line supervisors of production and operating workers	792	980	28	150	745	37	642	1,050	38	71.0
Aircraft structure, surfaces, rigging, and systems assemblers	6	-	-	1	-	-	5	-	-	-
Electrical, electronics, and electromechanical assemblers	110	605	27	53	518	20	57	706	200	73.4
Engine and other machine assemblers	7	-	-	2	-	-	5	-	-	-
Structural metal fabricators and fitters	27	-	-	0	-	-	27	-	-	-
Miscellaneous assemblers and fabricators	989	663	13	348	583	10	641	723	15	80.6
Bakers	151	549	16	89	533	23	61	565	21	94.3
Butchers and other meat, poultry, and fish processing workers	223	606	11	65	557	56	158	632	31	88.1
Food and tobacco roasting, baking, and drying machine operators and tenders	3	-	-	0	-	-	3	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Food batchmakers	55	557	22	34	-	-	21	-	-	-
Food cooking machine operators and tenders	8	-	-	5	-	-	3	-	-	-
Food processing workers, all other	142	624	31	52	539	24	90	749	55	72.0
Computer control programmers and operators	106	882	29	12	-	-	94	890	30	-
Extruding and drawing machine setters, operators, and tenders, metal and plastic	17	-	-	4	-	-	12	-	-	-
Forging machine setters, operators, and tenders, metal and plastic	5	-	-	0	-	-	5	-	-	-
Rolling machine setters, operators, and tenders, metal and plastic	11	-	-	3	-	-	7	-	-	-
Cutting, punching, and press machine setters, operators, and tenders, metal and plastic	58	745	35	5	-	-	53	766	39	-
Drilling and boring machine tool setters, operators, and tenders, metal and plastic	6	-	-	0	-	-	6	-	-	-
Grinding, lapping, polishing, and buffing machine tool setters, operators, and tenders, metal and plastic	35	-	-	2	-	-	33	-	-	-
Lathe and turning machine tool setters, operators, and tenders, metal and plastic	7	-	-	0	-	-	7	-	-	-
Milling and planing machine setters, operators, and tenders, metal and plastic	2	-	-	0	-	-	2	-	-	-
Machinists	309	863	29	16	-	-	293	878	26	-
Metal furnace operators, tenders, pourers, and casters	17	-	-	1	-	-	16	-	-	-
Model makers and patternmakers, metal and plastic	5	-	-	0	-	-	5	-	-	-
Molders and molding machine setters, operators, and tenders, metal and plastic	35	-	-	3	-	-	32	-	-	-
Multiple machine tool setters, operators, and tenders, metal and plastic	4	-	-	0	-	-	4	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Tool and die makers	47	-	-	2	-	-	45	-	-	-
Welding, soldering, and brazing workers	562	840	23	32	-	-	530	847	23	-
Heat treating equipment setters, operators, and tenders, metal and plastic	10	-	-	2	-	-	8	-	-	-
Layout workers, metal and plastic	10	-	-	1	-	-	9	-	-	-
Plating and coating machine setters, operators, and tenders, metal and plastic	17	-	-	4	-	-	13	-	-	-
Tool grinders, filers, and sharpeners	1	-	-	0	-	-	1	-	-	-
Metal workers and plastic workers, all other	356	698	18	66	611	14	290	724	29	84.4
Prepress technicians and workers	14	-	-	3	-	-	11	-	-	-
Printing press operators	137	754	48	26	-	-	111	804	55	-
Print binding and finishing workers	12	-	-	6	-	-	6	-	-	-
Laundry and dry-cleaning workers	108	432	23	76	416	13	32	-	-	-
Pressers, textile, garment, and related materials	28	-	-	18	-	-	11	-	-	-
Sewing machine operators	131	498	9	94	497	11	37	-	-	-
Shoe and leather workers and repairers	1	-	-	0	-	-	1	-	-	-
Shoe machine operators and tenders	6	-	-	3	-	-	2	-	-	-
Tailors, dressmakers, and sewers	43	-	-	24	-	-	19	-	-	-
Textile bleaching and dyeing machine operators and tenders	0	-	-	0	-	-	0	-	-	-
Textile cutting machine setters, operators, and tenders	7	-	-	0	-	-	7	-	-	-
Textile knitting and weaving machine setters, operators, and tenders	5	-	-	3	-	-	2	-	-	-
Textile winding, twisting, and drawing out machine setters, operators, and tenders	3	-	-	1	-	-	2	-	-	-
Extruding and forming machine setters, operators, and tenders, synthetic and glass fibers	0	-	-	0	-	-	0	-	-	-
Fabric and apparel patternmakers	3	-	-	3	-	-	0	-	-	-

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	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Upholsterers	19	-	-	5	-	-	14	-	-	-
Textile, apparel, and furnishings workers, all other	14	-	-	7	-	-	7	-	-	-
Cabinetmakers and bench carpenters	47	-	-	3	-	-	44	-	-	-
Furniture finishers	15	-	-	2	-	-	13	-	-	-
Model makers and patternmakers, wood	0	-	-	0	-	-	0	-	-	-
Sawing machine setters, operators, and tenders, wood	32	-	-	4	-	-	27	-	-	-
Woodworking machine setters, operators, and tenders, except sawing	23	-	-	10	-	-	13	-	-	-
Woodworkers, all other	11	-	-	0	-	-	11	-	-	-
Power plant operators, distributors, and dispatchers	33	-	-	1	-	-	32	-	-	-
Stationary engineers and boiler operators	84	1,073	96	2	-	-	82	1,086	72	-
Water and wastewater treatment plant and system operators	99	943	45	5	-	-	94	940	44	-
Miscellaneous plant and system operators	35	-	-	0	-	-	35	-	-	-
Chemical processing machine setters, operators, and tenders	65	894	35	8	-	-	57	899	34	-
Crushing, grinding, polishing, mixing, and blending workers	83	672	37	5	-	-	78	673	51	-
Cutting workers	56	595	35	12	-	-	43	-	-	-
Extruding, forming, pressing, and compacting machine setters, operators, and tenders	17	-	-	3	-	-	14	-	-	-
Furnace, kiln, oven, drier, and kettle operators and tenders	20	-	-	4	-	-	15	-	-	-
Inspectors, testers, sorters, samplers, and weighers	756	771	17	267	679	23	490	868	38	78.2
Jewelers and precious stone and metal workers	20	-	-	7	-	-	13	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Medical, dental, and ophthalmic laboratory technicians	74	741	31	41	-	-	33	-	-	-
Packaging and filling machine operators and tenders	250	529	25	140	496	14	110	602	27	82.4
Painting workers	159	710	24	16	-	-	142	725	35	-
Photographic process workers and processing machine operators	15	-	-	4	-	-	11	-	-	-
Semiconductor processors	1	-	-	0	-	-	1	-	-	-
Adhesive bonding machine operators and tenders	8	-	-	3	-	-	5	-	-	-
Cleaning, washing, and metal pickling equipment operators and tenders	6	-	-	0	-	-	6	-	-	-
Cooling and freezing equipment operators and tenders	4	-	-	0	-	-	4	-	-	-
Etchers and engravers	8	-	-	2	-	-	6	-	-	-
Molders, shapers, and casters, except metal and plastic	28	-	-	0	-	-	27	-	-	-
Paper goods machine setters, operators, and tenders	20	-	-	4	-	-	16	-	-	-
Tire builders	5	-	-	0	-	-	5	-	-	-
Helpers--production workers	37	-	-	10	-	-	26	-	-	-
Production workers, all other	992	678	13	263	566	18	729	725	16	78.1
Transportation and material moving occupations	7,542	689	5	1,237	538	9	6,305	724	7	74.3
Supervisors of transportation and material moving workers	197	850	39	45	-	-	152	878	66	-
Aircraft pilots and flight engineers	98	1,743	593	7	-	-	91	1,837	291	-
Air traffic controllers and airfield operations specialists	38	-	-	3	-	-	35	-	-	-
Flight attendants	74	878	82	53	822	60	21	-	-	-
Ambulance drivers and attendants, except emergency medical technicians	8	-	-	0	-	-	8	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Bus drivers	361	655	23	144	599	14	216	735	33	81.5
Driver/sales workers and truck drivers	2,791	817	10	155	559	39	2,636	829	12	67.4
Taxi drivers and chauffeurs	399	611	13	58	450	32	341	628	19	71.7
Motor vehicle operators, all other	39	-	-	5	-	-	34	-	-	-
Locomotive engineers and operators	34	-	-	5	-	-	30	-	-	-
Railroad brake, signal, and switch operators	3	-	-	0	-	-	3	-	-	-
Railroad conductors and yardmasters	54	1,132	65	4	-	-	50	1,143	56	-
Subway, streetcar, and other rail transportation workers	17	-	-	0	-	-	17	-	-	-
Sailors and marine oilers	21	-	-	1	-	-	20	-	-	-
Ship and boat captains and operators	30	-	-	1	-	-	29	-	-	-
Ship engineers	7	-	-	0	-	-	7	-	-	-
Bridge and lock tenders	5	-	-	0	-	-	5	-	-	-
Parking lot attendants	61	575	46	8	-	-	54	575	45	-
Automotive and watercraft service attendants	70	570	68	14	-	-	56	575	54	-
Transportation inspectors	37	-	-	3	-	-	34	-	-	-
Transportation attendants, except flight attendants	19	-	-	13	-	-	5	-	-	-
Other transportation workers	19	-	-	0	-	-	18	-	-	-
Conveyor operators and tenders	4	-	-	0	-	-	4	-	-	-
Crane and tower operators	64	1,122	108	3	-	-	60	1,079	271	-
Dredge, excavating, and loading machine operators	19	-	-	0	-	-	19	-	-	-
Hoist and winch operators	8	-	-	0	-	-	8	-	-	-
Industrial truck and tractor operators	596	641	15	48	-	-	549	641	16	-
Cleaners of vehicles and equipment	232	538	22	40	-	-	192	536	25	-
Laborers and freight, stock, and material movers, hand	1,595	603	6	318	541	12	1,277	620	7	87.3
Machine feeders and offbearers	25	-	-	10	-	-	15	-	-	-

Table 2. Median usual weekly earnings of full-time wage and salary workers, by detailed occupation, 2018 annual averages [Numbers in thousands]

Occupation	Total			Women			Men			Women's earnings as a percentage of men's
	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	Number of workers	Median weekly earnings	Standard error of median	
Packers and packagers, hand	490	495	6	285	484	6	205	516	11	93.8
Pumping station operators	16	-	-	0	-	-	16	-	-	-
Refuse and recyclable material collectors	63	524	30	8	-	-	55	536	45	-
Mine shuttle car operators	0	-	-	0	-	-	0	-	-	-
Tank car, truck, and ship loaders	6	-	-	0	-	-	6	-	-	-
Material moving workers, all other	41	-	-	4	-	-	37	-	-	-

Note: Median earnings are not shown where employment is less than 50,000. Women's earnings as a percentage of men's are not shown where employment for either women or men is less than 50,000. Dash indicates no data or data that do not meet publication criteria.
Source: U.S. Bureau of Labor Statistics.

Technical Notes

Although economic activity in the U.S. economy has grown, be it slowly, since the summer of 2009, the unemployment rate has remained stubbornly high. This continued high level of unemployment is especially puzzling in light of the fact that, during the same period, U.S. employers have started to post substantially more vacancies.

[i]Historically, there has been a tight negative relationship between the unemployment rate and the job openings rate. This relationship is known as the Beveridge curve. However, since the summer of 2009, this relationship seems to have broken down. In April 2011 the unemployment rate was 2.0 percentage points above its level implied by the Beveridge curve.

In this study we decompose the gap between the actual unemployment rate and that implied by the Beveridge curve into different parts using data from the Job Openings and Labor Turnover Survey (JOLTS).

[ii]The Beveridge curve can be interpreted as the job openings rate at which the current unemployment rate would be in its flow steady state. This steady state of the unemployment rate is that for which, at the current rates at which workers move between employment, unemployment, and non-participation, the unemployment rate would not change. In order to implement our decomposition, we construct the Beveridge curve by solving a fitted flow-steady-state equation using data on job openings, hires, layoffs and quits from JOLTS as well as data on entry and exit from the labor force from the CPS.

We then use the estimated flow-steady-state equation to derive an approximate additive decomposition of deviations of the unemployment rate from the Beveridge curve into parts due to hires per vacancy, layoffs, quits, as well as labor force entry and exit. We find that the current Beveridge curve gap is almost fully attributable to an unexplained shortfall in the vacancy yield, i.e. the number of hires per vacancy, while a lower than expected quits rate reduces the gap.

We further decompose the Beveridge curve gap to consider which industries account for the unexplained decline in the vacancy yield, as well as for the behavior of the quit and layoff rates. The result of this industry decomposition is that the shortfall in the vacancy yield is widespread across all industries. The vacancy yield deficit is particularly pronounced in construction, manufacturing, trade and transportation, leisure and hospitality, as well as in the industries not classified in JOLTS. From February 2011 through April 2011, the difference between the observed and predicted hires per vacancy in construction alone accounted for more than 1 percentage point of the 2.1 percent by which the actual unemployment rate exceeded that implied by the Beveridge curve.

Derivation of steady-state condition for the unemployment rate:

Because the labor force in month t , denoted by LF_t , equals the sum of the number of employed, E_t , and the number of unemployed, U_t , the change in the number of unemployed persons can be written as the change in the labor force minus the change in the number of employed persons. That is

$$U_t - U_{t-1} = \Delta U_t = \Delta LF_t - \Delta E_t \quad (1)$$

Normalizing both sides of this expression by the labor force and using the fact that the unemployment rate, u_t , is the ratio of the number of unemployed persons and the size of the labor force, we can write

$$(2) \quad \frac{L_t}{L_{t-1}} u_t - u_{t-1} = \frac{\Delta L_t}{L_{t-1}} - \frac{E_{t-1}}{L_{t-1}} \frac{\Delta E_t}{E_{t-1}}.$$

Hence, for the change in the unemployment rate to be zero, that is for unemployment to be in steady state, it must be the case that $g_t^{(lf)} = g_t^{(e)}$. Thus, the unemployment rate is in steady state whenever the growth rate of the labor force equals the growth rate of employment.

Of course, our decomposition is merely an accounting exercise and does not directly provide any explanations for the deviations of the flow rates from their predicted levels. We discuss some potential explanations as well as how the shift in the Beveridge curve may translate into a higher natural rate of unemployment in the final part of this article.

Approach

The approach in the current study builds on this concept of "bridge jobs", especially the findings that

- the majority of these bridge jobs are not in the same industry or occupation as the career job (Ruhm 1990), leading one to surmise that there is little transfer of skill or human capital from the career job to bridge job;
- the characteristics most highly correlated with the transition to bridge jobs are those associated with low-wage workers (Welch and Peracchi 1994), which again suggests lower levels of skill or human capital;
- the proportion of workers transitioning to bridge jobs declined significantly between 1969 and 1989 – a period when retirement rates were rising and labor force participation rates were falling, suggesting that access to bridge jobs may have declined during this period;
- the patterns of transitions among older workers paralleled that among younger workers in the 1970s and 1980s (Welch and Peracchi 1994).

These findings lead to the hypothesis that there may be a high level of competition and substitutability between older and younger workers for the types of part-time jobs typical of "bridge jobs", and that some common factor affected both older and younger workers in an increasing pattern during the 1970s and 1980s, which then attenuated in the 1990s and 2000s.

The "culprit" identified in this study – the common factor affecting both younger and older workers – is the post WWII baby boom. Their large relative cohort size – typified in a lagged Total Fertility Rate (TFR) – affected relative wages, unemployment, and the proportion of younger workers in part-time and/or part-year jobs, due to overcrowding in the cohort (demonstrated for young men by Macunovich 1999, 2002). The relative cohort size measure used here for older women is consequently the ratio of 25-34 year old women working part-time and/or part-year, to the number of women aged 55-69, and it is instrumented (given the possibility of endogeneity in the contemporaneous relative cohort size variable) using a 30-year lag of the Total Fertility Rate.

Exhibit Title

WE FURTHER DECOMPOSE THE BEVERIDGE CURVE GAP TO CONSIDER WHICH INDUSTRIES ACCOUNT FOR THE UNEXPLAINED DECLINE IN THE VACANCY YIELD, AS WELL AS FOR THE BEHAVIOR OF THE QUIT AND LAYOFF RATES. THE RESULT OF THIS INDUSTRY DECOMPOSITION IS THAT THE SHORTFALL IN THE VACANCY YIELD IS WIDESPREAD ACROSS ALL INDUSTRIES. THE VACANCY YIELD DEFICIT IS PARTICULARLY

PRONOUNCED IN CONSTRUCTION, MANUFACTURING, TRADE AND TRANSPORTATION, LEISURE AND HOSPITALITY, AS WELL AS IN THE INDUSTRIES NOT CLASSIFIED IN JOLTS. FROM FEBRUARY 2011 THROUGH APRIL 2011, THE DIFFERENCE BETWEEN THE OBSERVED AND PREDICTED HIRES PER VACANCY IN CONSTRUCTION ALONE ACCOUNTED FOR MORE THAN 1 PERCENTAGE POINT OF THE 2.1 PERCENT BY WHICH THE ACTUAL UNEMPLOYMENT RATE EXCEEDED THAT IMPLIED BY THE BEVERIDGE CURVE.

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[i] This is the first one

[ii] This is the second one